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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,858	08/25/2003	David P. Aschenbeck	25068B	4208
22889	7590	05/20/2005	EXAMINER	
OWENS CORNING 2790 COLUMBUS ROAD GRANVILLE, OH 43023			PARKER, FREDERICK JOHN	
			ART UNIT	PAPER NUMBER
			1762	
DATE MAILED: 05/20/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/647,858

Applicant(s)

ASCHENBECK, DAVID P.

Examiner

Frederick J. Parker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: (1) Please update the "Related Applications" section on page 1 and the status of application 09/944968 on page 3, 19. (2) the use of lower case "g" (see API 1980) to express acceleration of gravity without being so defined is confusing because "g" is also the SI symbol for grams. While "g" is apparently an acceptable abbreviation for acceleration of gravity (see [www.glembrook.k12...website](http://www.glembrook.k12...)), the Examiner respectfully suggests the specification be amended to define "g" as acceleration of gravity to avoid confusion. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 35-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claims 35-38 are vague and indefinite because the relative terms "low" and "high" fail to clearly convey the intended speed of movement of the flow gates, the terms are not defined by the specification, and the indistinct nature of the relative terms would not be readily ascertainable by one skilled in the art.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen US 3101281 in view of White US 6360638.

Bowen teaches applying granules to asphalt coated sheets to form shingles, the granules being applied from hoppers I-VI, each regulated by an adjustable gate 21 having an arcuate closing face 28 and plate 22 to avoid jamming of granules being dispensed and permitting uniform granule flow (col. 3, 54- col. 4, 27). The gate is actuated by pneumatic means comprising motor-controlled cylinder and piston device. The gist of the method involves dispensing greater amounts of granules when the machine (substrate movement) is operating at high speeds than when operating at relatively lower speeds, thereby maintaining uniformity in appearance of the shingle product, regardless of machine / substrate speed (col. 1, 58- col. 2, 25). Thus the method provides means for changes in gate opening, and accordingly amount of granules applied

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remaining essentially the same, with changes in speed of the strip substrate (col. 7, 5-553). Given the descriptions of the gate means on col. 4 and 7, top, it would appear to be “rotary” being the essentially the same as or functionally equivalent to that described on page 9, 9-30 of Applicant’s specification. Specific means for detecting strip speed are not cited.

White et al teaches a similar method of forming roofing shingles, in which it is taught on col. 5, 4-59 that sensors can be used for monitoring aspects of shingle manufacture, including locations of shingle portions, height differences, color/shading differences, and **speed sensors to ascertain speed of the moving web**. Given that Bowen teaches the criticality of web speed versus gate opening/ granule deposition to provide uniformity in appearance of the shingle product, and such sensors were not available in 1963, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Bowen by incorporating the web speed sensors of White et al to provide greater control of web speed and granule deposition to better assure uniformity of the shingle product.

Since the degree of gate opening is expressly controlled by a specific device, the movement of the gate necessarily also controls the amount of granules deposited, see col. 4, 34-35 and col. 7, 5-25.

While acceleration of the gate is not cited, it would have been reasonable to assume a pneumatic cylinder and piston device would have had an acceleration less than “4g” or just under 40 m/s/s given the technology of 1963 per claims 7-9,13-18,26-30. Rates of acceleration would have been determined by routine experimentation for any specific process changes or conditions, as alluded to on column 1 of Bowen, to maintain a uniformity of granule deposition, absent a clear and convincing showing of synergistic or unexpected results to the contrary. It is

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not inventive to find optimal ranges by routine experimentation , In re Aller 105 USPQ 233.

Mere adjustment of features to achieve optimal results is not patentable, In re Schreiber 214

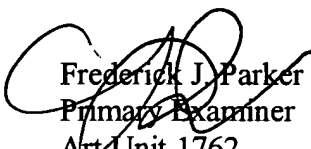
USPQ 285.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/ 272-1426.

The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571/272-1423. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Frederick J. Parker
Primary Examiner
Art Unit 1762

fjp